

What is claimed is:

1. A method of transferring state information between an http server and an http client, said method comprising the steps of:
requesting a file on said http server from said http client;
transmitting said file from said http server to said http client;
transmitting a state object from said http server to said http client; and
storing said state object on said http client.
2. The method of transferring state information as claimed in claim 1 wherein said state object comprises a name attribute.
3. The method of transferring state information as claimed in claim 1 wherein said state object is transmitted from said http client to a server when said http client makes predefined http requests to said server and wherein said state object is transmitted along with said file.
4. The method of transferring state information as claimed in claim 1 wherein said state object includes a domain attribute defining a domain and said state object is transmitted from said http client to a server only when said http client makes an http request to said server and said server is within said domain.

5. The method of transferring state information as claimed in claim 1 wherein said state object further includes a path attribute defining a file system path and said state object is transmitted from said http client to said server only when said http client makes said http request for a document within said path at said server.

6. The method of transferring state information as claimed in claim 1 wherein said state object includes an expiration attribute defining a valid life time of said state object.

7. The method of transferring state information as claimed in claim 1 wherein said state object includes an attribute requesting transmission using a secure channel.

8. The method of transferring state information as claimed in claim 1 wherein said state object is encoded within a header associated with said file.

9. A method of on-line shopping by a customer using a browser running on a client computer, said method comprising the steps of:
sending a first request by said browser to a merchant server for a first HTML document describing a product;

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displaying said HTML document on said client computer, said
displayed HTML document describing said product;
selecting, by said customer, said product;
sending a second request by said browser to said merchant server in
response to said selection made by said customer;
sending a state object from said merchant server to said browser, said
state object identifying said product; and
storing said state object on said client computer by said browser.

10. The method of claim 9 wherein state object remains valid for
a predetermined time.

11. The method as claimed in claim 9 further comprising the steps of:
requesting a check-out page by said customer;
sending a third request to said check-out page on a server; and
sending said state object along with said third request to said server.

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~~12.~~ A computer readable medium on an http client containing
executable program instructions for performing a method comprising:
requesting a file on a http server;
receiving said file from said http server;
receiving a state object which specifies state information from said
http server;
storing said state object on said http client.

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~~13.~~ A computer readable medium on an http server containing executable program instructions for performing a method comprising:
receiving a request for a file on said http server from an http client;
transmitting said file from said http server to said http client;
transmitting a state object which specifies state information from said http server to said http client.

¹¹
~~14.~~ A network of computer systems comprising:
a client system having a client processor and a client computer readable medium coupled to said client processor, said client computer readable medium containing program instructions for receiving a state object which specifies state information and for storing said state object on said client computer readable medium;
a server system having a server processor and a server computer readable medium coupled to said server processor, said server system coupled to said client system through a network medium, said server computer readable medium containing program instructions for transmitting a file from said server system to said client system and for transmitting said state object to said client system.

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~~15.~~ A network as in claim ~~14~~ wherein said server system comprises an http server and wherein said client system comprises an http client.

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~~16.~~ A network as in claim ~~15~~ wherein said network medium comprises a client modem and a server modem and an interconnection between said client modem and said server modem.

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~~17.~~ A computer system, said computer system comprising:
a processor;
a memory coupled to said processor;
a computer readable medium coupled to said processor, said
computer readable medium containing executable program
instructions for:
requesting a file on a server;
receiving said file from said server;
receiving a state object which specifies state information from
said server; and
storing said state object in one of said memory and said
computer readable medium.

18. A method for subscribing to an on-line information service,
said method comprising the steps of:
requesting a first information service from an http server; and
transmitting a state object to said http server, said state object
specifying user information to said http server.

¹⁵~~19~~. A computer readable medium as in Claim ⁹~~12~~ wherein said state object is transmitted from said http client to a server when said http client makes predefined http requests to said server.

¹⁶~~20~~. A computer readable medium as in Claim ⁹~~12~~ wherein said state object includes an expiration attribute defining a valid life time of said state object.

¹⁷~~21~~. A computer readable medium as in Claim ⁹~~12~~ wherein said state object further includes a path attribute defining a file system path and said state object is transmitted from said http client to said server only when said http client makes said http request for a document within said path at said server.

¹⁸~~22~~. A computer readable medium as in Claim ⁹~~12~~ wherein said state object includes a domain attribute defining a domain and said state object is transmitted from said http client to a server only when said http client makes an http request to said server and said server is within said domain.

¹⁹~~23~~. A computer readable medium as in Claim ¹⁰~~13~~ wherein said state object is transmitted from said http client to a server when said http client makes predefined http requests to said server.

²⁰~~24~~. A computer readable medium as in Claim ¹⁰~~13~~ wherein said state object includes a domain attribute defining a domain and said state object is transmitted from said http client to a server only when said http client makes an http request to said server and said server is within said domain.

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~~25.~~ A computer readable medium as in Claim ~~13~~¹⁰ wherein said state object includes an expiration attribute defining a valid life time of said state object.

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~~26.~~ A computer readable medium as in Claim ~~13~~¹⁰ wherein said state object further includes a path attribute defining a file system path and said state object is transmitted from said http client to said server only when said http client makes said http request for a document within said path at said server.

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~~27.~~ A computer system as in Claim ~~17~~¹⁴ wherein said state object is transmitted from said computer system ^{to a} server when said computer system makes predefined requests to said server.

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~~28.~~ A computer system as in Claim ~~17~~¹⁴ wherein said state object includes a domain attribute defining a domain and said state object is transmitted from said computer system to a server only when said computer system makes a request to said server and said server is within said domain.

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~~29.~~ A computer system as in Claim ~~17~~¹⁴ wherein said state object further includes a path attribute defining a file system path and said state object is transmitted from said computer system to said server only when said computer system makes a request for a document within said path at said server.

26 ~~30.~~ ¹⁴ A computer system as in Claim ~~17~~ wherein said state object includes an expiration attribute defining a valid life time of said state object.

31. A method as in Claim 18 wherein said state object specifies user identification information and billing information.

32. A method as in Claim 18 further comprising:
requesting a second information service from said http server or an alternative http server;
transmitting said object to said http server or said alternative http server.

33. A method as in Claim 32 wherein a user of said on-line information service browses from said first information service to said second information service without having to enter user information.

34. A method of Claim 32 wherein said user information comprises subscription information required by a first publisher of said first information service.

35. A method as in Claim 34 wherein said user information comprises subscription information required by a second publisher of said ~~second information service.~~

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36. A computer system comprising:
a display;
a processor coupled to said display;
a memory coupled to said processor;
a computer readable medium coupled to said processor, said
computer readable medium containing executable program
instructions for:
 sending a first request to a merchant server for a first HTML
document describing a product;
 displaying said HTML document on said display,
said displayed HTML document describing said product;
 allowing a customer to select said product;
 sending a second request to said merchant server
in response to said selection made by said customer;
 sending a state object from said merchant server
to said computer system, said state object identifying said product; and
 storing said state object on said computer system.